

# Responding to Change: Agile-in-the-large, Approaches and Their Consequences

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**Abstract.** Empirical studies covering Agility at the organisational scale are few in number. Organisations seeking clarity about the efficacy of any approach to business Agility must turn to the commercial literature for information and guidance. As a whole, research into Agile Software Development suffers from a lack of rigour and theoretical grounding, a problem also evident in Information Systems research in general. These issues have led to recent calls for a clear research agenda for scaling Agility and for the quality of contributions to be addressed. Diffusions research has a long history in a wide range of domains and provides a clear theoretical framework for this qualitative PhD study.

**Keywords:** Scaled agility · Transformation · Diffusions research

## 1 Statement of the Research Problem

Over the last few years, Australian organisations have become increasingly interested in the concept of business Agility, which appears to offer a way forward in an increasingly disrupted and digital world [1]. However, those embarking on this path have found that the process of becoming an Agile organisation is not straightforward. Large scale organisational transformation is complex, expensive and inherently risky with few successful examples. Organisational governance teams find that accessing high quality, independent advice is a significant challenge. This contrasts with the extensive body of academic literature and practical experience through which we understand Agility from the software team perspective.

In order to progress understanding and support further research into Agility and organisational transformations, this PhD study will seek to answer the following overarching question:

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*How should a given organisation evaluate the applicability of existing and emergent approaches to implementing or scaling Agile, based on their goals for such an implementation and the environment in which the organisation is operating?*

## 2 Motivation, Contribution and Originality of the Proposed Study

Recently a lack of theoretical underpinnings for Agile research has been highlighted by researchers as a cause for concern [2,3]. Criticisms include; a lack of empirical support for claims about the efficacy of Agile methods; no unified framework to guide the various streams of research; and a lack of methodological and theoretical rigour [4]. Addressing these concerns results in the selection of Diffusion of Innovations (DOI) [5] as a suitable theoretical framework to guide the research.

DOI theory [5] has a strong theoretical basis and has been widely used to explain the diffusion process across a broad range of domains and disciplines [6]. Within these traditions, studies have investigated different aspects of the diffusion process, including the consequences of innovations, this final aspect contributing less than 1 % of diffusion studies and will be key vehicle through which the results will be framed [5].

As an applied discipline, Information Systems research should result in findings that have both a theoretical and a practical application [7]. This latter requirement will be addressed by the development of a taxonomy allowing organisations to position themselves according to their organisational characteristics. The theoretical contribution of the study will arise from the application of (DOI) [5] to an emergent area, business Agility. This will serve the dual purpose of testing the applicability of the theory to the domain and at the same time offers a repeatable, verifiable model through which to support further research, development of the existing theory, or the generation of new theory [8].

## 3 Brief Literature Review

Since 2001 much of the early focus and research into Agility has been tightly focused on the practices and processes of Agile software development teams. A number of researchers have synthesised and thematically categorised this extensive body of work [2,9–11]. These meta-analyses suggest that the existing body of work is focussed on a subset of practice based topics.

Whilst software Agility focusses on the practices contributing to software and product development, business Agility is a broader concept. In this regard Agile practices are often combined with the ideas behind Lean thinking [12] which share a close philosophical alignment. A number of high profile digital organisations have successfully demonstrated Agility as a whole of business approach [13]. One of the best know of these is Spotify though its own particular

model of scaled Agility, generally known as the Spotify Model [14]. Organisations that have attempted to transform to an Agile business model have found the landscape replete with complex challenges [15]. A relatively small number of case studies documenting the experiences of such organisations demonstrate this [16, 17]. A more recent development of interest to the business community are a number of frameworks which claim to address some of these issues and provide a transformation pathway to business Agility [18–21].

## 4 Description of Proposed Research Methodology

A two-part adaptive case study design is proposed; part one will focus on the development of a narrative description of the organisational characteristics and innovation diffusion process for each case. Multiple sources of evidence will be used to generate thick descriptions of each case. Part two of the study will examine the consequences of the diffusion approach chosen by an organisation. For each case, this will be guided by the factors identified in part one of the study and will focus on: positive and negative outcomes, the role of change agents and the extent to which an organisation's social structure and socioeconomic gaps have been impacted.

## 5 Results Achieved so Far (if Any)

Ethics approval for the study has been granted and initial data collection is currently underway.

## 6 Plans for Publication of the Proposed Study or Set of Studies

The study will be published as a PhD thesis.

## 7 Future Agenda

As both a researcher and a practitioner in this field it is hoped that further publication of the outcomes of this study will lead to the development of considered approaches towards organisational transformation. The study may also provide a sound basis for ongoing research into specific aspects of business Agility.

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